0051603

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

AUG 1 1 1999

99-EAP-436

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504

Dear Mr. Wilson:

ELEVATION OF DISPUTE RESOLUTION FOR HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) CHANGE CONTROL FORM M-32-99-02 ADDRESSING INTERIM MILESTONE M-32-06 AND TARGET DATE M-32-06-T01

References: (1) Letter, from G. H. Sanders to M. A. Wilson, Ecology, "Tri-Party Agreement, Change Control Form M-32-99-02 Addressing Interim Milestone M-32-06 and Target Date M-32-06-T01, Initiation of Dispute Resolution," 99-EAP-398, dated July 12, 1999. 51436

(2) Letter, from G. H. Sanders to M. A. Wilson, Ecology, "Tri-Party Agreement Change Control Form M-32-99-02 Addressing Interim Milestone M-32-06 and Target Date M-32-06-T01," 99-EAP-300, dated June 21, 1999.

On June 21, 1999, the U. S. Department of Energy, Richland Operations Office (RL) provided the State of Washington Department of Ecology (Ecology) with a change control form, for Interim Milestone M-32-06 and Target Date M-32-06-T01, requesting deletion of the "244-AR Vault Interim Status Tank Actions" from the M-32-00 series of milestones. On July 5, 1999, the fourteen-day Ecology response period expired, which constituted disapproval of the request per the requirements of Agreement Action Plan Section 12.3.3. As a result of Ecology's disapproval of change request M-32-99-02, and in order to seek prompt resolution of any underlying issues, on July 12, 1999, RL elected to invoke the dispute resolution procedures of Agreement Article VIII.

Since the dispute resolution provisions were invoked, meetings have been held between the Project Managers representing RL and Ecology. However, the Project Managers have not been able to reach agreement during the thirty-day dispute resolution period. Therefore, RL elects under the provisions of Agreement Article VIII, Paragraph 30.A, to elevate the matter to the Inter Agency Management Integration Team (IAMIT) for further consideration. RL's Statement of Dispute for this matter is attached for consideration by the IAMIT.

If you have any questions or need additional information, please contact Hector M. Rodriguez, of my staff, on (509) 376-6421.

Sincerely,

George H. Sanders, Administrator
Hanford Tri-Party Agreement

EAP:HMR

Attachment

cc w/attach:
J. R. Wilkinson, CTUIR
S. L. Dahl-Crumpler, Ecology
L. J. Cusack, Ecology
R. V. Heggen, Ecology
R. F. Stanley, Ecology
A. Valero, Ecology
D. R. Sherwood, EPA
L. E. Borneman, FDH
S. B. Cherry, FDH
J. S. Hertzel, FDH
T. B. Veneziano, FDH
M. Reeves, HAB
B. G. Erlandson, LMHC
M. L. Blazek, OOE
A. R. Sherwood, WMH
P. Sobotta, NPT
R. Jim, YN
Administrative Record, H6-08

STATEMENT OF DISPUTE

I. Summary

The State of Washington Department of Ecology (Ecology), U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy, Richland Operations Office (RL) entered into the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) for the purpose of ensuring that environmental impacts associated with past and present activities at the Hanford Site would be thoroughly investigated and the appropriate response actions taken to protect public health, welfare and the environment. To that end, the agencies address environmental compliance by establishing milestones and schedules under the Tri-Party Agreement. Major Milestone M-32-00 (Change Control Form M-32-92-01) has a completion date of September 30, 1999 and was crafted to address integrity assessment activities for the Hanford Site interim status tank systems with the exception of the Single-Shell Tank (SST) system.

On June 21, 1999, RL provided Ecology with Change Control Form M-32-99-02 for Tri-Party Agreement Interim Milestone M-32-06 and Target Date M-32-06-T01, requesting deletion of the "244-AR Vault Interim Status Tank Actions," from the M-32-00 major milestone series. Interim Milestone M-32-06 and Target Date M-32-06-T01 identify tank system integrity assessment activities for the 244-AR Vault that are to be completed prior to placing the vault into service. The vault is out of service (since approximately 1978) with no future plans for use. As the 244-AR Vault is currently under the Single-Shell Tank (SST) system Part A Form 3, it is reasonable to address the vault's issues under the M-45-00 major milestone series.

The fourteen-day period for review expired without formal response from Ecology constituting disapproval of the change control form per the requirements of Tri-Party Agreement Action Plan Section 12.3.3.

II. History

In 1994, Tri-Party Agreement Interim Milestone M-32-06 and Target Date M-32-06-T01 were included in the M-32-00 major milestone series as "fail-safe" measures to prevent the use of the 244-AR Vault prior to the completion of an integrity assessment and identification of required compliance upgrades (see Attachment 1). These actions were to take place only if a decision was made to place the 244-AR Vault into service. The 244-AR Vault has been out of service since approximately 1978 with no future plans for use and was transferred to the SST Part A Permit, Form 3 (Revision 4) on October 1, 1996.

As the completion conditions for the 244-AR Vault activities, i.e., "prior to restart," would never be experienced, RL initially provided Ecology with a draft change control form requesting the deletion of Interim Milestone M-32-06 and Target Date M-32-06-T01 during the November 1, 1996 M-32-00 Project Managers Meeting. The 1996 draft Change Control Form M-32-96-03 referred to the following: 1) The scope of the M-32-00 milestone series (which

specifically excludes SST units), 2) An outline of the vault's current status, and 3) An identification of SST milestones (within the M-45-00 major milestone series), as the proper arena for addressing the 244-AR Vault. Ecology took an action to review the draft change control form. No further activity was conducted on this change control form until 1999. In March 1998 and again in July 1999, Ecology was briefed on the current status of the 244-AR Vault.

On June 21, 1999, RL provided Ecology with RL-approved Change Control Form M-32-99-02 that reiterated the information from above. Due to the expiration of the fourteen-day period for review and Ecology's disapproval of the change control form, RL notified Ecology, via a letter dated July 12, 1999, of it's election to initiate dispute resolution and of their desire to work collaboratively with Ecology to resolve Ecology's concerns. Ecology has indicated verbally that they are unwilling to approve deletion of the Interim Milestone M-32-06 and Target Date M-32-06-T01 until Tri-Party Agreement milestones are in place specifically addressing the 244-AR Vault issues.

On August 4, 1999, RL and Ecology tentatively agreed to jointly request an extension to the one-month formal Dispute Resolution period, which expires on August 11, 1999. This extension would allow time to initiate negotiations on enforceable milestones required to address the 244-AR Vault issues. On August 6, 1999, Ecology informed RL via telephone that they were reversing their position and would be requiring signed milestones for the 244-AR Vault and that an extension to the one-month formal Dispute Resolution period would not be approved. This action further jeopardized completion of Major Milestone M-32-00.

III. U.S. Department of Energy Position

Interim Milestone M-32-06 and Target Date M-32-06-T01 should be deleted. As originally crafted, the interim milestone and target date were meant to require assessment of the 244-AR Vault only if the vault were placed into service. Since the vault will not be put into service, Interim Milestone M-32-06 and Target Date M-32-06-T01 are now obsolete. Disapproval of Change Control Form M-32-99-02 places completion of Major Milestone M-32-00 as unattainable.

Ecology's desire to establish milestones to specifically address 244-AR Vault closure activities should not impact the completion of this major milestone. Tri-Party Agreement milestone negotiations on 244-AR Vault activities should be initiated outside of M-32-00.

RL is not proposing to delete Interim Milestone M-32-06 and Target Date M-32-06-T01 to avoid disposition of the vault under the hazardous waste environmental regulations. It has merely recommended that the activities of the 244-AR Vault be included in the M-45-00 major milestone series for closure of the SST system. Ecology is the lead agency on both the M-32 and M-45 major milestone series. There should be no added burden to Ecology to switch Tri-Party Agreement control mechanisms from M-32 major milestone series tank system integrity assessment requirements to M-45 major milestone series SST closure requirements. In

addition to the current 244-AR Vault issues' lack of applicability to the M-32-00 major milestone series scope, Ecology has denied the change control form without discussing the establishment of one or more M-45-00 milestones to address appropriate disposition activities.

RL wishes to address disposition of the 244-AR Vault in a cost effective, expedient manner. This action seems best suited for the Tri-Party Agreement M-45-00 milestone series. To do otherwise, may draw needed funds away from other more important cleanup activities. Public health and the environment are protected by not using the vault and planning appropriate activities in a cogent manner.

IV. Conclusion/Recommendation

Major Milestone M-32-00 is in jeopardy of completion not because Interim Milestone M-32-06 and Target Date M-32-06-T01 were not performed but because of Ecology's administrative action. RL is willing to disposition the 244-AR Vault in accordance with the environmental regulations under the appropriate Tri-Party Agreement milestone series. The disposition of the vault should be handled as expediently as necessary to protect public health and the environment without impacting other cleanup activities.

RL is committed to negotiate with Ecology to establish the best series of Tri-Party Agreement milestones in which to address the 244-AR Vault. To that end, RL and Ecology had tentatively agreed to conduct negotiations during the August 4, 1999 meeting. RL recommends that those negotiations proceed.

RL requests of Ecology the following actions:

1. Immediate approval of Change Control Form M-32-99-02, deleting Interim Milestone M-32-06 and Target Date M-32-06-T01.

2. Establish signed and enforceable milestones under the M-45 major milestone series, which will appropriately disposition the 244-AR Vault.

V. List of Attachments to This Statement of Dispute

Attachment 1

Change Control Form M-32-01

Attachment 2

Single-Shell Tank Part A Application, Form 3, Rev. 4, dated October 1, 1996 (relevant pages)

Attachment 3

November 1, 1996 Project Managers Meeting Minutes and Change Control Form M-32-96-03

Attachment 4

March 1998 Briefing to Ecology (relevant pages)

Attachment 5

RL letter from G. Sanders to M. Wilson, Ecology, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Change Control Form M-32-99-02 Addressing Interim Milestone M-32-06 and Target Date M-32-06-T01," 99-EAP-300, dated June 21, 1999

Attachment 6

RL letter from G. Sanders to M. Wilson, Ecology, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Change Control Form M-32-99-02 Addressing Interim Milestone M-32-06 and Target Date M-32-06-T01, Initiation of Dispute Resolution," 99-EAP-398, dated June 21, 1999

Statement of Dispute
Regarding Change Control Form M-32-99-02

ATTACHMENT 1

Change Control Form M-32-92-01

47461

M-32-92-01	Federal Facility Agreement and Consent Order Change Control Form	Date Jan. 25, 1994

Originator

Phone

Class of Change

[X] I - Signatories [ ] II - Project Manager [ ] III - Unit Manager

Change Title

Interim Status Dangerous Waste Tank Systems Hanford Federal Facility Agreement and Consent Order Milestone, M-32.

Description/Justification of Change

Add milestone.

The proposed milestone establishes Tri-Party Agreement compliance schedules for the Hanford interim status dangerous waste tank systems.

Impact of Change

This change establishes a new major milestone with interim milestones. Completion of interim milestone tasks may identify the need for additional actions or interim milestones in the future. This milestone does not impact any other Tri-Party Agreement interim or major milestone.

Affected Documents

Affected Documents: Hanford Federal Facility Agreement Consent Order Action Plan, Appendix D, Figure D-1 Work Schedule, and Table D-3.

Approvals X Approved ___Disapproved

This change form approved by Amendment Four to the Hanford Federal Facility Agreement and Consent Order executed by the signatories on January 25, 1994.

John Wagoner — January 25, 1994
DOE — Date

Gerald Emison — January 25, 1994
EPA — Date

Mary Riveland — January 25, 1994
Ecology — Date

Proposed Interim Status Dangerous Waste Tank Systems Hanford Federal Facility Agreement and Consent Order Milestone M-32

M-32-00	Complete Identified Dangerous Waste Tank Corrective Actions. Completion of interim milestone tasks may identify the need for additional actions or interim milestones in the future. The reports and deficiency correction schedules prepared to satisfy current milestones will be used to identify any appropriate new interim milestones. Any new interim milestones will subsequently be established via the change process in Section 12 of the Action Plan. Tank integrity assessments will not be required for terminal cleanout of the Plutonium-Uranium Extraction Plant, except for Tanks F18, U3, and U4. Integrity assessments for Tanks F18, U3, and U4 have been completed.	Sept. 99
M-32-01	Complete Plutonium Finishing Plant (PFP) Tank Interim Status Actions. Stabilization activities at the Plutonium Finishing Plant (PFP), dependent on evaluation of alternatives under the National Environmental Policy Act, will be limited to a liquid waste generation of 300,000 gallons or less to the 241-Z tank system. The waste is temporarily stored in the 241-Z Tank System prior to transfer to the Double-Shell Tank Farms. Following any such stabilization activity, the PFP will not initiate any additional mission(s), except as described below, that results in the discharge of waste to the 241-Z tanks prior to completion of tank system upgrades necessary for compliance with state and federal dangerous waste regulations. Glove-box scale, laboratory, plant maintenance, and miscellaneous support activities necessary for safe, secure storage of materials and protection of personnel and the environment will continue. With exception of the stabilization activities, discharge to 241-Z will be limited to 50,000 gallons per year until compliance is achieved or terminal cleanout is completed. Any terminal cleanout discharge requirements in excess of 50,000 gallons per year will be reviewed and approved by the three parties prior to implementation.	Dec. 94

M-32-01-T01	Complete and submit integrity assessment report for PFP interim status tank system. Provide a schedule to address any deficiencies described in the report related to tank system compliance (Deficiencies not addressed in this schedule will be addressed in the compliance strategy of target action M-32-01-T02).	Oct. 93
M-32-01-T02	Submit proposed compliance strategy for remaining dangerous waste tank system issues.	June 94
M-32-01-T03	Complete construction of piping upgrades between 234-5Z, 236-Z and 241-Z Tank System (Project C-031H).	Dec. 94
M-32-02	Complete 219-S Tank Interim Status Actions.	Sept. 97
M-32-02-T01	Provide notification of completion of Definitive Design for Project W-178 - Construction of Interim Status Tank System Upgrades for 219-S Tank System.	Jan. 96
M-32-02-T02	Upgrade existing transfer lines to meet secondary containment requirements.	Sept. 97
M-32-03	Complete T Plant Tank Actions.	Sept. 99
M-32-03-T01	Implement periodic visual inspection and static leak test program for 2706-T and 211-T tanks.	Oct. 93
M-32-03-T02	Complete Conceptual Design Report (Project W-259) for T Plant tank system upgrades.	Apr. 94
M-32-03-T03	Submit schedule for completion of T Plant tank system upgrades (Project W-259).	June 94
M-32-03-T04	Complete modification of 2706-T Staging Pad to eliminate accumulation of precipitation.	June 94
M-32-03-T05	Install level indication device for 211-T tank.	June 94
M-32-03-T06	Complete scheduled upgrades to T Plant tank system (Project W-259).	Sept. 99
M-32-04	Complete Double-Shell Tank Interim Status Tank Actions.	June 94
M-32-04-T01	Submit design standards review for one tank farm.	Sept. 93
M-32-04-T02	Prepare and submit report documenting non-destructive examination equipment development and implementation plans.	Sept. 93
M-32-04-T03	Complete all DST visual examination and prepare and submit reports.	Sept. 93
M-32-04-T04	Complete and submit the Transfer Facility Compliance Plan.	June 94
M-32-04-T05	Submit to Ecology a final plan and schedule for completion of the Double-Shell Tank integrity assessments.	June 94
M-32-05	Complete 242-A Evaporator Interim Status Tank Actions.	1 Month after hot restart

M-32-05-T01	Complete and submit integrity assessment report for the 242-A Evaporator interim status tank system. Provide a schedule to address any deficiencies described in the report related to tank system compliance.	1 Month after hot restart
M-32-06	Complete 244-AR Vault Interim Status Tank Actions.	Prior to restart
M-32-06-T01	Complete and submit integrity assessment report and identified upgrades for 244-AR Vault interim status tank system (except that DST transfer lines that penetrate the 244-AR Vault will continue to be used). Provide a schedule to address any deficiencies described in the report related to tank system compliance.	Prior to restart
M-32-07	Complete B Plant Interim Status Tank Actions.	Dec. 95
M-32-07-T01	Identify additional dangerous waste tanks and ancillary equipment that will be routinely used during cleanout and stabilization activities. Submit schedule to perform integrity assessments on identified additional dangerous waste tanks and ancillary equipment. B Plant will not accept any waste for treatment, except waste generated as a result of on-going B Plant/WESF operations, without completion of tank integrity assessments and completion of upgrades necessary for compliance with WAC 173-303-640 or an applicable permit on systems used for the treatment, storage or disposal of the waste.	Apr. 94
M-32-07-T02	Complete and submit integrity assessment plan for Tanks 25-1, 25-2, 23-1, concentrator E-23-3, and identified ancillary equipment.	Oct. 94
M-32-07-T03	Complete and submit integrity assessment report for Tanks 25-1, 25-2, 23-1, concentrator E-23-3, and ancillary equipment as identified in the integrity assessment plan. Provide a schedule to address any deficiencies described in the report related to tank system compliance. The integrity assessment report of the low level waste concentrator, E-23-3, and the concentrated waste receiver, TK-23-1, will be completed only if their operation is planned beyond December 1995. The determination to include these two tanks in the integrity assessment report will be made by October 1994.	Dec. 95
M-32-08	Complete Grout Interim Status Tank Actions.	Prior to processing DST waste

M-32-08-T01	Complete and submit integrity assessment report for Grout interim status tank system. Complete activities required to correct any deficiencies described in the report related to tank system compliance.	Prior to processing DST waste

Statement of Dispute
Regarding Change Control Form M-32-99-02

ATTACHMENT 2

Single Shell Tank Part A Application, Form 3,

Rev. 4, Dated October 1, 1996

(relevant pages)

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 character/inch).

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

1. EPA/STATE I.D. NUMBER: W A 7 8 9 0 0 0 8 9 6 7

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (mo., day, & yr.)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or if this is a revised application, enter your facility's EPA/STATE I.D. Number in Section I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

☐ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

MO.	DAY	YR.
0 3	2 2	4 3

*FOR EXISTING FACILITIES, PROVIDE THE DATE *(mo., day, & yr.)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*
*The date construction of the Hanford Facility commenced.

☐ 2. NEW FACILITY *(Complete item below)*

MO.	DAY	YR.

FOR NEW FACILITIES, PROVIDE THE DATE *(mo., day, & yr.)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

B. REVISED APPLICATION *(place an "X" below and complete Section I above)*

☒ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☒ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES - CODES AND CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the *(Section III-C)*.

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D80	GALLONS OR LITERS
LANDFILL	D81	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D82	*ACRES OR HECTARES*
OCEAN DISPOSAL	D83	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D84	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Section III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING SECTION III *(shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons.* The facility also has an incinerator that can burn up to 20 gallons per hour.

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		6				
X-2	T 0 3	20	E		6				
1	S 0 2	348,390,160	L		7				
2	T 0 1	2,271,240	V		8				
3	S 0 3	0.11	C		9				
4					10				

CONTINUE ON REVERSE

Continued from the front.

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESS (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Refer to the following pages.

IV. DESCRIPTION OF DANGEROUS WASTES

A. DANGEROUS WASTE NUMBER - Enter the four digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.

B. ESTIMATED ANNUAL QUANTITY - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

1. Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.

2. In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.

3. Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

EXAMPLE FOR COMPLETING SECTION IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	0 0 0 2	400	P	T 0 3 D 8 0	
X-3	0 0 0 1	100	P	T 0 3 D 8 0	
X-4	0 0 0 2			T 0 3 D 8 0	Included with above

FORM 3 DANGEROUS WASTE PERMIT APPLICATION
U.S. ENVIRONMENTAL PROTECTION AGENCY/STATE IDENTIFICATION NUMBER WA7890008967

Section III.C, Description of Process Codes Listed in Section III.A

S02, T01

The Single-Shell Tank (SST) System consists of 149 tanks that were built between the years 1943 and 1964 to store mixed waste (S02) generated on the Hanford Site. There are two types of tanks in the SST System, the 100 series and the 200 series. The 133 100-series SSTs are 23 meters (75 feet) in diameter with operating capacities of 1,892,700 to 3,785,400 liters (500,000 to 1,000,000 gallons). The sixteen 200-series SSTs are smaller and of a similar design with a 6 meter (20 foot) diameter and a capacity of 208,197 liters (55,000 gallons). The SST System also includes two waste transfer vault systems, the 244-AR and 244-CR Vault. The 244-AR Vault contains four permitted tanks and the 244-CR vault contains two permitted tanks. Table 1 lists tank numbers, year of construction, year removed from service, and operating capacity.

The maximum process design capacity for tank storage at the SST System is 348,390,160 liters (92,035,230 gallons).

Treatment of the mixed waste in the SST System occurs when solids and interstitial liquids are separated and/or cooling liquids are added (T01). These treatment processes involve, but are not limited to, mechanical retrieval, sluicing, and saltwell pumping of the mixed waste. The SST System has a process design limit of 2,271,240 liters (600,000 gallons) per day based on the simultaneous pumping of two SSTs in a 24-hour period. Ancillary equipment used for the transfer of liquid mixed waste consists of: (1) centrifugal pumps capable of pumping liquid mixed waste at 1,514 liters (400 gallons) per minute, (2) induction pumps capable of pumping liquid waste from the salt well at 19 liters (5 gallons) per minute, and (3) associated valves and piping to the DST System. Mechanical equipment, sluicing equipment, and similar treatment/processes are not limited to the processes described previously.

The maximum process design capacity for tank treatment at the SST System is 2,271,240 liters (600,000 gallons) per day.

S03

Associated with the SST System are 54 inactive diversion boxes designated as waste piles (S03). A summary of the SST System and corresponding diversion boxes is provided in Table 2. All diversion boxes used within the SST System are inactive and presently are isolated (weather covered). "Isolated" as used here means exterior water intrusion has been restricted.

The maximum process design capacity for waste pile storage at the SST System is approximately 23 kilograms (50 pounds) of waste lead stored in each diversion box (worst-case scenario) accounting for a total of 1,202 kilograms (2,650 pounds) or 0.11 cubic meter (0.14 cubic yard) of waste lead in storage.

Table 1 — Single-Shell Tank System Summary
(Sheet 1 of 3)

Tank Number	Year of Construction	Year Removed from Service[1]	Operating Capacity (Liters)
241-A-101	1954-1955	1980	3,785,400
241-A-102	1954-1955	1980	3,785,400
241-A-103	1954-1955	1980	3,785,400
241-A-104	1954-1955	1975	3,785,400
241-A-105	1954-1955	1963	3,785,400
241-A-106	1954-1955	1980	3,785,400
241-AX-101	1963-1964	1980	3,785,400
241-AX-102	1963-1964	1980	3,785,400
241-AX-103	1963-1964	1980	3,785,400
241-AX-104	1963-1964	1978	3,785,400
241-B-101	1943-1944	1974	1,892,700
241-B-102	1943-1944	1978	1,892,700
241-B-103	1943-1944	1977	1,892,700
241-B-104	1943-1944	1972	1,892,700
241-B-105	1943-1944	1972	1,892,700
241-B-106	1943-1944	1977	1,892,700
241-B-107	1943-1944	1969	1,892,700
241-B-108	1943-1944	1977	1,892,700
241-B-109	1943-1944	1977	1,892,700
241-B-110	1943-1944	1971	1,892,700
241-B-111	1943-1944	1976	1,892,700
241-B-112	1943-1944	1977	1,892,700
241-B-201	1943-1944	1971	208,197
241-B-202	1943-1944	1977	208,197
241-B-203	1943-1944	1977	208,197
241-B-204	1943-1944	1977	208,197
241-BX-101	1946-1947	1972	1,892,700
241-BX-102	1946-1947	1971	1,892,700
241-BX-103	1946-1947	1977	1,892,700
241-BX-104	1946-1947	1980	1,892,700
241-BX-105	1946-1947	1980	1,892,700
241-BX-106	1946-1947	1971	1,892,700
241-BX-107	1946-1947	1977	1,892,700
241-BX-108	1946-1947	1974	1,892,700
241-BX-109	1946-1947	1974	1,892,700
241-BX-110	1946-1947	1977	1,892,700
241-BX-111	1946-1947	1977	1,892,700
241-BX-112	1946-1947	1977	1,892,700
241-BY-101	1948-1949	1971	2,839,050
241-BY-102	1948-1949	1977	2,839,050
241-BY-103	1948-1949	1973	2,839,050
241-BY-104	1948-1949	1977	2,839,050
241-BY-105	1948-1949	1974	2,839,050
241-BY-106	1948-1949	1977	2,839,050
241-BY-107	1948-1949	1974	2,839,050
241-BY-108	1948-1949	1972	2,839,050
241-BY-109	1948-1949	1979	2,839,050
241-BY-110	1948-1949	1979	2,839,050
241-BY-111	1948-1949	1977	2,839,050
241-BY-112	1948-1949	1978	2,839,050
241-C-101	1943-1944	1970	1,892,700
241-C-102	1943-1944	1976	1,892,700
241-C-103	1943-1944	1979	1,892,700
241-C-104	1943-1944	1980	1,892,700
241-C-105	1943-1944	1979	1,892,700
241-C-106	1943-1944	1979	1,892,700
241-C-107	1943-1944	1978	1,892,700
241-C-108	1943-1944	1976	1,892,700
241-C-109	1943-1944	1976	1,892,700
241-C-110	1943-1944	1976	1,892,700
241-C-111	1943-1944	1978	1,892,700
241-C-112	1943-1944	1976	1,892,700
241-C-201	1943-1944	1977	208,197
241-C-202	1943-1944	1977	208,197
241-C-203	1943-1944	1977	208,197
241-C-204	1943-1944	1977	208,197

Table 1 — Single-Shell Tank System Summary
(Sheet 2 of 3)

Tank Number	Year of Construction	Year Removed from Service[1]	Operating Capacity (Liters)
241-S-101	1950-1951	1980	2,839,050
241-S-102	1950-1951	1980	2,839,050
241-S-103	1950-1951	1980	2,839,050
241-S-104	1950-1951	1968	2,839,050
241-S-105	1950-1951	1974	2,839,050
241-S-106	1950-1951	1979	2,839,050
241-S-107	1950-1951	1980	2,839,050
241-S-108	1950-1951	1979	2,839,050
241-S-109	1950-1951	1979	2,839,050
241-S-110	1950-1951	1979	2,839,050
241-S-111	1950-1951	1972	2,839,050
241-S-112	1950-1951	1974	2,839,050
241-SX-101	1953-1954	1980	3,785,400
241-SX-102	1953-1954	1980	3,785,400
241-SX-103	1953-1954	1980	3,785,400
241-SX-104	1953-1954	1980	3,785,400
241-SX-105	1953-1954	1980	3,785,400
241-SX-106	1953-1954	1980	3,785,400
241-SX-107	1953-1954	1964	3,785,400
241-SX-108	1953-1954	1962	3,785,400
241-SX-109	1953-1954	1965	3,785,400
241-SX-110	1953-1954	1976	3,785,400
241-SX-111	1953-1954	1974	3,785,400
241-SX-112	1953-1954	1969	3,785,400
241-SX-113	1953-1954	1958	3,785,400
241-SX-114	1953-1954	1972	3,785,400
241-SX-115	1953-1954	1965	3,785,400
241-T-101	1943-1944	1979	1,892,700
241-T-102	1943-1944	1976	1,892,700
241-T-103	1943-1944	1974	1,892,700
241-T-104	1943-1944	1974	1,892,700
241-T-105	1943-1944	1976	1,892,700
241-T-106	1943-1944	1973	1,892,700
241-T-107	1943-1944	1976	1,892,700
241-T-108	1943-1944	1974	1,892,700
241-T-109	1943-1944	1974	1,892,700
241-T-110	1943-1944	1976	1,892,700
241-T-111	1943-1944	1974	1,892,700
241-T-112	1943-1944	1977	1,892,700
241-T-201	1943-1944	1976	208,197
241-T-202	1943-1944	1976	208,197
241-T-203	1943-1944	1976	208,197
241-T-204	1943-1944	1976	208,197
241-TX-101	1947-1948	1980	2,839,050
241-TX-102	1947-1948	1977	2,839,050
241-TX-103	1947-1948	1980	2,839,050
241-TX-104	1947-1948	1977	2,839,050
241-TX-105	1947-1948	1977	2,839,050
241-TX-106	1947-1948	1977	2,839,050
241-TX-107	1947-1948	1977	2,839,050
241-TX-108	1947-1948	1977	2,839,050
241-TX-109	1947-1948	1977	2,839,050
241-TX-110	1947-1948	1977	2,839,050
241-TX-111	1947-1948	1977	2,839,050
241-TX-112	1947-1948	1974	2,839,050
241-TX-113	1947-1948	1971	2,839,050
241-TX-114	1947-1948	1971	2,839,050
241-TX-115	1947-1948	1977	2,839,050
241-TX-116	1947-1948	1969	2,839,050
241-TX-117	1947-1948	1969	2,839,050
241-TX-118	1947-1948	1980	2,839,050
241-TY-101	1951-1952	1973	2,839,050
241-TY-102	1951-1952	1979	2,839,050
241-TY-103	1951-1952	1973	2,839,050
241-TY-104	1951-1952	1974	2,839,050
241-TY-105	1951-1952	1980	2,839,050
241-TY-106	1951-1952	1959	2,839,050

Table 1 — Single-Shell Tank System Summary
(Sheet 3 of 3)

Tank Number	Year of Construction	Year Removed from Service[1]	Operating Capacity (Liters)
241-U-101	1943-1944	1960	1,892,700
241-U-102	1943-1944	1979	1,892,700
241-U-103	1943-1944	1978	1,892,700
241-U-104	1943-1944	1951	1,892,700
241-U-105	1943-1944	1978	1,892,700
241-U-106	1943-1944	1977	1,892,700
241-U-107	1943-1944	1980	1,892,700
241-U-108	1943-1944	1979	1,892,700
241-U-109	1943-1944	1978	1,892,700
241-U-110	1943-1944	1975	1,892,700
241-U-111	1943-1944	1980	1,892,700
241-U-112	1943-1944	1970	1,892,700
241-U-201	1943-1944	1977	208,197
241-U-202	1943-1944	1977	208,197
241-U-203	1943-1944	1977	208,197
241-U-204	1943-1944	1977	208,197

Waste Transfer Vaults

Tank Number	Year of Constuction	Year Removed from Service	Operating Capacity (Liters)
244-AR-001	1976	NA	162,772
244-AR-002	1976	NA	162,772
244-AR-003	1976	NA	18,113
244-AR-004	1976	NA	18,113
244-CR-003	1946	NA	55,494
244-CR-011	1946	NA	170,343

[1]The last year the tank was capable of receiving waste; actual date of last waste receipt might have been earlier.

Table 2. Single-Shell Tank System Diversion Box Matrix.

Unit	SSTs	Diversion box	Construction date
A	241-A-101 through 241-A-106 241-AX-101 through 241-AX-104	241-A-152	1955
		241-A-153	1966
		241-AX-151	1963
		241-AX-152	1962
		241-AX-155	1983
		241-AY-151	1975
		241-AY-152	1970
B	241-B-101 through 241-B-112 241-B-201 through 241-B-204 241-BX-101 through 241-BX-112	241-B-151	1951
		241-B-152	1951
		241-B-153	1951
		241-B-154	1951
		241-B-252	1951
		241-BR-152	1952
		241-BX-153	1951
		241-BX-154	1951
		241-BX-155	1951
		241-BXR-151	1952
		241-BXR-152	1952
		241-BXR-153	1952
		241-BYR-152	1952
		241-BYR-153	1952
		241-BYR-154	1952
C	241-C-101 through 241-C-112 241-C-201 through 241-C-204	241-C-151	1951
		241-C-152	1951
		241-C-153	1951
		241-C-154	1965
		241-C-252	1951
		241-CR-151	1952
		241-CR-152	1952
		241-CR-153	1952
S	241-S-101 through 241-S-152 241-SX-101 through 241-SX-115	240-S-151	1952
		240-S-152	1952
		241-S-152	1975
		241-SX-151	1953
		241-SX-152	1957
T	241-T-101 through 241-T-112 241-T-201 through 241-T-204 241-TX-101 through 241-TX-118 241-TY-101 through 241-TY-106	241-T-151	1950
		241-T-152	1951
		241-T-153	1951
		241-T-252	1951
		242-T-151	1951
		241-TR-152	1951
		241-TR-153	1952
		241-TX-153	1951
		241-TX-155	1951
		241-TXR-151	1951
		241-TXR-152	1952
		241-TXR-153	1952
		241-TY-153	1952
U	241-U-101 through 241-U-112 241-U-201 through 241-U-204	241-U-153	1951
		241-U-252	1951
		241-UR-151	1951
		241-UR-152	1952
		241-UR-153	1952
		241-UR-154	1952

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER *(entered from page 1)*: WA7890008867

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D001	204,116,566	K	S02 T01	Storage-Tank/Treatment-Tank
2	through				
3	D011				
4	D018				
5	D019				
6	D022				
7	D028				
8	D029				
9	D030				
10	D033				
11	through				
12	D036				
13	D038				
14	through				
15	D041				
16	D043				
17	WP01				
18	WP02				
19	WT01				
20	WT02				
21	F001				
22	through				
23	F005				Included With Above
24	D008	1,202	K	S03	Storage-Waste Pile
25					
26					

Continued from the front.

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM SECTION D(1) ON PAGE 3.

The mixed waste stored in the SST System was generated by four major chemical reprocessing operations: the bismuth phosphate (BiPo) process, the reduction-oxidation (REDOX) process, the plutonium-uranium extraction (PUREX) process, and the tributyl phosphate (TBP) process.

The dangerous waste numbers listed under the description of dangerous waste are based on a computer model and past process knowledge rather than on chemical analysis of waste. The Estimated Annual Quantity of Dangerous Waste (Section IV.B.) listed is 204,116,556 kilograms (450,000,000 pounds) and is based on an average density of the waste calculated from the densities of 26 core samples taken of waste stored in various SSTs. The average density (1.4 kilograms/liter [12 pounds/gallon]) was multiplied by 139,440,000 liters (36,836,000 gallons) and rounded-up to 204,116,556 kilograms (450,000,000 pounds). The figure 139,440,000 liters (36,836,000 gallons) represents the estimated volume of liquid mixed waste remaining in the SST System.

The quantity of waste lead stored in the diversion boxes is based on previous research of historical records. Because of the radiological hazards associated with individual inspection of the diversion boxes, a quantity of 23 kilograms (50 pounds) of waste lead was estimated for each box. This represents a conservative estimate, as 23 kilograms (50 pounds) is the maximum quantity of waste lead known to be in any one diversion box.

V. FACILITY DRAWING Refer to attached drawing(s).

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS Refer to attached photograph(s).

All existing facilities must include photographs *(aerial or ground-level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

VII. FACILITY GEOGRAPHIC LOCATION This information is provided on the attached drawing(s) and photograph(s).

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*

VIII. FACILITY OWNER

[x] A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME *(print or type)*	SIGNATURE	DATE SIGNED
John D. Wagoner, Manager U.S. Department of Energy Richland Operations Office	John D. Wagoner	9/26/96

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME *(print or type)*	SIGNATURE	DATE SIGNED
SEE ATTACHMENT		

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

John D. Wagoner 9/26/96

Owner/Operator
John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

Date

9/13/96

Co-operator
H. J. Hatch,
President and Chief Executive Officer
Fluor Daniel Hanford, Inc.

Date

Statement of Dispute
Regarding Change Control Form M-32-99-02

ATTACHMENT 3

November 1, 1996 Project Managers Meeting Minutes

and

Change Control Form M-32-96-03

47039

Meeting Minutes
Interim Status Dangerous Waste Tank Systems
Hanford Federal Facility Agreement and Consent Order
Milestone M-32-00

PROJECT MANAGERS MEETING
November 1, 1996

DISTRIBUTION LIST

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D. Alison	LMH	R1-51	T. Laney	LMH	S5-05
G. Ellis-Balone	RL	A5-15	R. K. P'Pool	LMH	S5-03
E. M. Bowers	RL	S7-55	M. L. Ramsay	RL	S7-54
R. C. Bowman	RFSH	H6-24	F. A. Ruck	FDH	H6-22
W. R. Brown	FDH	H6-21	K. V. Scott	SESC	H5-52
L. J. Cusack	Ecology	B5-18	A. R. Sherwood	RFSH	H6-22
B. G. Erlandson	LMH	R2-36	J. M. Thurman	LMH	R1-51
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D. E. Jackson	RL	A5-15	M. T. Yasdick	RFSH	H6-10

Administrative Record: TPA Milestone M32-00:
T-2-5, TS-2-1, T-2-7, TS-2-3, S-2-3
[Care of EDMC, LMSI (H6-08)]

Please send comments on distribution to A. R. Sherwood, H6-22, 376-6391.

Meeting Minutes
Interim Status Dangerous Waste Tank Systems
Hanford Federal Facility Agreement and Consent Order
Milestone M-32-00

PROJECT MANAGERS MEETING
November 1, 1996

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Project Mangers Meeting (PMM).

W. R. Brown, Representative, Fluor Daniel Hanford, Inc. Date: 2-19-97

D. E. Jackson, Project Manager, Department of Energy, Richland Operations Office Date: 3-5-97

J. M. Thurman, Representative, Lockheed Martin Hanford Corporation Date: 2/5/97

R. W. Wilson, Unit Manager, Washington State Department of Ecology Date: 02/19/97

Purpose: Discuss current Double-Shell Tank Farm, 244-AR Vault and 242-A Evaporator issues related to Milestone M-32-00.

Meeting minutes are attached. The minutes are comprised of the following:

Attachment 1 - Agenda
Attachment 2 - Summary of Discussion, Agreements and Actions
Attachment 3 - Attendance List
Attachment 4 - Meeting Handouts

MILESTONE M-32-00
PROJECT MANAGERS MEETING
November 1, 1996

Agenda

1. INTRODUCTIONS

2. 244-AR VAULT

3. 242-A EVAPORATOR

4. CHANGE CONTROL FORM M-32-96-02

MILESTONE M-32-00
PROJECT MANAGERS MEETING
November 1, 1996

Summary of Discussion, Agreements and Actions

The purpose of this meeting was primarily to discuss double-shell tank (DST) integrity assessments. As part of this discussion, methods used to address 244-AR Vault and 242-A Evaporator issues were statused.

242-A EVAPORATOR - Though not reflected in the PMM agenda's order of topics, the 242-A Evaporator was discussed first. Ms. Ana Sherwood, of Rust Federal Services of Hanford Inc. (RFSH), provided a brief explanation why the 242-A Evaporator was not included in the scope of draft change control form M-32-96-02. Originally, the 242-A Evaporator had been included in the work scope outlined by the "Tank Waste Remediation System Tank System Integrity Assessments Program Plan (WHC-SD-WM-AP-017, Rev. 1). This resulted in the Evaporator's inclusion in later proposed DST integrity assessment milestone activities. After reevaluating this approach, it was determined that the Evaporator did not need to be included in draft M-32-96-02 as its dangerous waste tank system integrity assessment had already been performed. As part of existing interim milestone M-32-05, an integrity assessment was performed on the 242-A Evaporator in March 1994. At the time of the assessment, Mr. Gary Anderson, of the Washington State Department of Ecology (Ecology), who was familiar with the assessment's results, provided a determination that based on the essential nature of the Evaporator, it could be operated in its current configuration. The integrity assessment report identified a future assessment date of five years after submittal of the report. As the 242-A Evaporator is currently on schedule to perform its next assessment, it no longer needs a vehicle like the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) to address assessment compliance schedules.

Ms. Laura Cusack and Mr. Bob Wilson, both of Ecology, were given a copy of the current M-32-00 major milestone and a copy of Mr. Anderson's letter (see Attachment 4, items #1 and #4, respectively) and will review the removal of the 242-A Evaporator from draft change control form M-32-96-02.

244-AR VAULT - Ms. Sherwood handed out a schematic of the 244-AR Vault (see Attachment 4, item # 3) and reviewed current plans to transfer the 244-AR Vault from the DST Part A permit application (DST Part A, DOE/RL-88-21) to the single-shell tank (SST) Part A Permit application (SST Part A, DOE/RL-88-21). The reasons for this transfer are that the vault is inactive (no waste transfers received since 1978 [estimated]) and there are no plans for any future missions. When Milestone M-32-00 was created, it specifically excluded the SST units from its scope. The SST units were to be addressed by a different milestone(s). With the transfer of the 244-AR Vault to the SST Part A Permit application, the vault is properly addressed by SST milestones. A second draft change control form, M-32-96-03, was provided to Ecology for their consideration (see Attachment 4, item # 2). This draft change control form moves the 244-AR Vault activities from Tri-Party Agreement milestone M-32-00 to milestone M-45-00.

CHANGE CONTROL FORM M-32-96-02 - A copy of draft change control form M-32-96-02 was given to Ecology (see Attachment 4, item # 5) for their review. Mr. Dale Jackson, of the U.S. Department of Energy, Richland Operations Office (RL), explained that this draft change control form completed the DST integrity assessments by 1998, but did not complete corrective actions by 1999 as proposed by Ecology. Therefore, there may be a need for more milestones that go beyond the 1999 date.

Ms. Cusack mentioned the need for a discussion on the DST ultrasonic evaluations. She was shown where draft interim milestone M-32-09 has such a discussion. Ecology will review this section and propose further wording, if desired. Mr. Wilson asked how the quality of the test itself would be evaluated. Mr. Jackson answered that Mr. Keith Scott, of SGN Eurisys Services Corporation (SESC), would evaluate the test method and if a problem did arise the change request process would be available for any changes required. Mr. Mark Ramsay (RL) pointed out that a previous commitment to have the Tank Integrity Structural Panel (TSIP) provide a peer review and recommendation on the first tank examination was still in effect. When asked, Ms. Cusack agreed to provide the independent qualified registered professional engineer (IQRPE) certifying the DST integrity assessment report with a letter acknowledging Ecology's acceptance of assessing six DSTs for all 28 DSTs from a regulatory standpoint if the IQRPE agreed with the validity of the "6 for 28" assessment on an engineering basis.

At this point of the meeting, Mr. Scott provided a short briefing on the status of the DST integrity assessments (see Attachment 4, item #6). As he outlined the near-term actions, Mr. Scott emphasized that the dates given were contingent on each other. He explained that the mock-up test, scheduled for the week of November 11th, would not be performed on a "cleaned" surface. The surface would not, however, be as "dirty" as a tank surface. The next test, scheduled for the week of November 18th, would be an abridged version of an actual tank examination, i.e., the abridged test would scan a 5-inch strip on the primary and secondary walls of tank AW-103. Ms. Cusack asked to be present during discussions (asked that notification be provided to Ecology, but Ecology will not hinder progress if they were not available) that evaluate data received from these tests. Mr. Scott agreed and also invited Ecology to attend on the day of the tests. Ms. Cusack asked if there would still be an expert panel (this panel is different than the TSIP) involved.

Mr. Scott answered that there would be for the actual test of tank AW-103, schedule for the week of November 25th, should acceptance criteria be exceeded. The expert panel would not be involved during the tests scheduled for the weeks of November 11th and 18th as these tests were just pilot runs. He also reminded everyone that the TSIP would be involved in evaluating the tank AW-103 test results (from the week of November 25th). Next, Ms. Cusack wondered if the weather or holidays could impact the test schedule. Mr. Scott explained that as a water coupling would be used, freezing conditions could impact the schedule. As to the holidays, there is a 30 day period between tests to allow for "regrouping" once the first test was completed. This should allow for delays due to the holidays. Ms. Cusack recommended that the TSIP be alerted to this schedule so that they could be as available as possible.

At this point, Mr. Ramsay established the protocol for Lockheed Martin Hanford (LMH) to discuss DST test/result problems, should they occur, with Ecology. He suggested that LMH could directly and informally (no transmittal letter) go to Ecology without first going though Fluor Daniel Hanford, Inc. (FDH) for concurrence. Mr. Fred Ruck (FDH) said that he did not see a problem with this as long as LMH first went though RL. He agreed that FDH could receive information at the same time as Ecology and that a cc:message would be an acceptable form to use.

Then, Mr. Wilson questioned why the ultrasonic examination was being performed only in the region beneath the riser. Mr. Scott explained that caution had to be exercised with the test equipment. His concern dealt with the test equipment's ability to stay on the tank wall. If the equipment slips, it could be damaged. One precaution against this is the cable length being used. The cable length is shorter, by design, than the tank height. This is done so that should the equipment slip, it would not hit the annulus floor. However, this does not prevent the equipment from swinging back and forward. Ms. Cusack asked what was the cost per test. Mr. Scott provided, from memory, the cost of the vendor (there are additional costs involved) to perform a wall ultrasonic evaluation (provide data and interpretation): ~$100K for the mock-up test (week of November 11th); ~$30K - $40K for the "abridged" test (week of November 18th); ~$20K - $30K for the actual AW-103 test (week of November 25th).

Mr. Wilson also asked if all the tank bottom air slots were accessible. Mr. Scott responded that not all the slots were designed for access. Those that would be part of the assessment activities would be entered up to about 1-foot. The tank bottom evaluation is restricted by commercially available equipment. At best, the maximum length possible would be a few feet. Ms. Cusack asked if two risers would be possible, if it was determined that the tank walls would not required cleaning. Mr. Jackson replied that once the first test was completed, the use of two risers could be investigated. Again, should this be the case, the change request process could then be used to modify the assessment activities. Ms. Cusack expressed her concern that increasing assessment scope would be difficult once draft interim milestone M-32-09 was approved. She said that Ecology would propose language to the draft interim milestone stating that Ecology was not totally comfortable with the percentage of tank surface being examined. Mr. Jackson agreed to review their proposed wording. After discussing the TSIP guidelines on percentages and

the various features of the DST integrity assessment strategy that either increase or decrease uncertainties, Mr. Wilson stated that examining a 20-inch by 35-foot strip was part of the process that was in itself being evaluated and that this evaluation was in line with Ecology's intent. Mr. Jackson pointed out that if the draft interim milestones of change control form M-32-96-02 were to require more than $1.7 million, then he would have to involve DOE-HQ and get their approval.

Ms. Cusack asked if some of the draft interim milestone M-32-10 assessments activities could be completed by 1998. Mr. Scott answered that if some of those activities were to be performed earlier than scheduled that it would impact the completion of some of the DST integrity assessments from draft interim milestone M-32-09. Ms. Cusack and Mr. Jackson agreed that Ecology could propose language to the preamble of the draft change control form to acknowledge the possibility of accelerating the draft M-32-10 assessment activities.

Ms. Cusack requested a copy of the planning package for the $1.7 million budget. Mr. Ramsay agreed that Mr. Scott could provide Ecology with a copy but stated that the package was for information only and not subject to comment.

Ms. Cusack mentioned her wishes to have a method of measuring process. Mr. Ramsay offered to forward her a copy of the monthly status report he receives from Mr. Scott.

Mr. Jackson took the action to schedule the next PMM (tentatively scheduled for November 14th).

Mr. Jackson closed the meeting with the assertion that the draft change control form M-32-96-02 contained the best package obtainable and that no negotiation slack had been built-in.

Agreements/Actions:

1. Ms. Cusack/Mr. Wilson will review the removal of the 242-A Evaporator from draft change control form M-32-96-02.

2. Ms. Cusack/Mr. Wilson will review the draft change control form M-32-96-03 (244-AR Vault).

3. Ms. Cusack/Mr. Wilson will review the draft change control form M-32-96-02 (DST integrity assessments).

4. Ms. Cusack will provide a letter for the IQRPE acknowledging Ecology's acceptance of assessing six DSTs for all 28 DSTs from a regulatory standpoint provided the IQRPE agrees with the validity of this assessment from an engineering basis.

5. Mr. Scott will notify Ms. Cusack/Mr. Wilson of test days and invite Ecology to test data evaluation discussions (for tests scheduled for weeks of November 11th, 18th, and 25th). (*Mr. Scott notified Ms. Cusack/Mr. Wilson of the November 19, 1996 mock-up test and of the November 23, 1996 through November 25, 1996 AW-103 abridged and actual tests. Mr. Wilson attended the November 23, 1996 test.*)

6. Mr. Scott will inform the TSIP (or select members) of the AW-103 assessment schedule. (*Mr. Scott has informed Mr. Kamal Bandyopadhyay of the TSIP of this schedule.*)

7. Lockheed Martin Hanford will be able to directly and informally (no transmittal letter) discuss DST test/result problems with Ecology, after first informing RL. Fluor Daniel Hanford will receive this type of information at the same time as Ecology.

8. Mr. Scott will provide Ms. Cusack with a copy of his DST integrity assessment budget planning package. (*Mr. Scott sent Ms. Cusack his budget planning package via cc:mail on November 4, 1996.*)

9. Mr. Ramsay will forward copies of Mr. Scott's monthly status report to Ms. Cusack.

10. Mr. Jackson will finalize meeting details for the next PMM.

MILESTONE M-32-00
PROJECT MANAGERS MEETING
November 1, 1996

Attendees

NAME	ORGANIZATION
Russ Brown	Fluor Daniel Hanford, Inc. - TPA Integration
Laura Cusack	Ecology
Geneva Ellis-Balone	DOE-EAP
Brad Erlandson	Lockheed Martin Hanford Corporation
Dale Jackson	DOE-EAP
Mark Ramsay	DOE-RL
Fred Ruck	Fluor Daniel Hanford, Inc. - Environmental Protection
Keith Scott	SGN Eurisys Services Corporation
Ana Sherwood	Rust Federal Services of Hanford Inc.
Jack Thurman	Lockheed Martin Hanford Corporation
Bob Wilson	Ecology

M-32-00 PROJECT MANAGERS MEETING

November 1, 1996

NAME	ORGANIZATION	TELEPHONE	MSIN
Ana Sherwood	Rust	376 6391	~~H5~~
Laura L. Cusack	Ecology	736-3038	
Keith Scott	SESC	376-5445	H5-52
Bob Wilson	Ecology	736-3031	
Elena Ellis-Balone	RL-DOE	372-2225	A5-15
JACK THURMAN	LOCKHEED MARTIN	373-5609	R1-51
Russ Brown	FDH TPAI	376-4026	B2-35
Brad Erlandson	Lockheed Martin	372-2678	R2-36
Mark Ramsey	DOE-RL	376-7924	S7-54
FRED Roll	FDH/Environmental Protection	376-9826	H6-23
DALE JACKSON	RL-EAP	376-4851	A5-15

MILESTONE M-32-00
PROJECT MANAGERS MEETING
November 1, 1996

Meeting Handouts
(attached)

1. Current Major Milestone M-32-00.

2. Draft Change Control Form M-32-96-03 (244-AR Vault).

3. Schematic of the 244-AR Vault.

4. Letter, Mr. Gary Anderson, Ecology, to Mr. James Bauer, RL, "242-A Evaporator Restart," dated November 16, 1993.

5. Draft Change Control Form M-32-96-02 (DST assessments; pagination has been corrected).

6. "Double-Shell Tank System Integrity Assessment Status" handout.

Number	Milestone	Due Date
M-26-05F	SUBMIT TO EPA AND ECOLOGY AN EVALUATION OF DEVELOPMENT STATUS OF TRITIUM TREATMENT TECHNOLOGY THAT WOULD BE PERTINENT TO THE CLEANUP AND MANAGEMENT OF TRITIATED WASTE WATER (e.g., THE 242-A EVAPORATOR PROCESS CONDENSATE LIQUID EFFLUENT) AND TRITIUM CONTAMINATED GROUNDWATER AT THE HANFORD SITE.	8/31/2003 and biennially thereafter
M-26-05G	SUBMIT TO EPA AND ECOLOGY AN EVALUATION OF DEVELOPMENT STATUS OF TRITIUM TREATMENT TECHNOLOGY THAT WOULD BE PERTINENT TO THE CLEANUP AND MANAGEMENT OF TRITIATED WASTE WATER (e.g., THE 242-A EVAPORATOR PROCESS CONDENSATE LIQUID EFFLUENT) AND TRITIUM CONTAMINATED GROUNDWATER AT THE HANFORD SITE.	8/31/2005 and biennially thereafter
M-26-05H	SUBMIT TO EPA AND ECOLOGY AN EVALUATION OF DEVELOPMENT STATUS OF TRITIUM TREATMENT TECHNOLOGY THAT WOULD BE PERTINENT TO THE CLEANUP AND MANAGEMENT OF TRITIATED WASTE WATER (e.g., THE 242-A EVAPORATOR PROCESS CONDENSATE LIQUID EFFLUENT) AND TRITIUM CONTAMINATED GROUNDWATER AT THE HANFORD SITE.	8/31/2007 and biennially thereafter
M-32-00	COMPLETE IDENTIFIED DANGEROUS WASTE TANK CORRECTIVE ACTIONS.	9/30/1999
LEAD AGENCY: ECOLOGY	COMPLETION OF INTERIM MILESTONE TASKS MAY IDENTIFY THE NEED FOR ADDITIONAL ACTIONS OR INTERIM MILESTONES IN THE FUTURE. THE REPORTS AND DEFICIENCY CORRECTION SCHEDULES PREPARED TO SATISFY CURRENT MILESTONES WILL BE USED TO IDENTIFY ANY APPROPRIATE NEW INTERIM MILESTONES. ANY NEW INTERIM MILESTONES WILL SUBSEQUENTLY BE ESTABLISHED VIA THE CHANGE PROCESS IN SECTION 12 OF THE ACTION PLAN. TANK INTEGRITY ASSESSMENTS WILL NOT BE REQUIRED FOR TERMINAL CLEANOUT OF THE PLUTONIUM-URANIUM EXTRACTION PLANT, EXCEPT FOR TANKS F18, U3, AND U4. INTEGRITY ASSESSMENTS FOR TANKS F18, U3, AND U4 HAVE BEEN COMPLETED.	
M-32-02	COMPLETE 219-S TANK INTERIM STATUS ACTIONS.	9/30/1997
M-32-02-T02	UPGRADE EXISTING TRANSFER LINES TO MEET SECONDARY CONTAINMENT REQUIREMENTS.	9/30/1997
M-32-03	COMPLETE T PLANT TANK ACTIONS.	9/30/1999
M-32-03-T06	COMPLETE SCHEDULED UPGRADES TO T PLANT TANK SYSTEM (PROJECT W-259).	9/30/1999
M-32-06	COMPLETE 244-AR VAULT INTERIM STATUS TANK ACTIONS.	TBD

Number	Milestone	Due Date
M-32-06-T01	COMPLETE AND SUBMIT INTEGRITY ASSESSMENT REPORT AND IDENTIFIED UPGRADES FOR 244-AR VAULT INTERIM STATUS TANK SYSTEM (EXCEPT THAT DST TRANSFER LINES THAT PENETRATE THE 244-AR VAULT WILL CONTINUE TO BE USED). PROVIDE A SCHEDULE TO ADDRESS ANY DEFICIENCIES DESCRIBED IN THE REPORT RELATED TO TANK SYSTEM COMPLIANCE.	TBD
M-32-07	COMPLETE B PLANT INTERIM STATUS TANK ACTIONS.	6/30/1996
M-32-07-T05	PERFORM OPERATIONS TO SEPARATE RADIONUCLIDES FROM THE ORGANIC SOLVENT WASTE TO SUPPORT DISPOSITION OF THE WASTE TO AN OFFSITE DISPOSAL FACILITY, OR COMPLIANT INTERIM STORAGE.	6/30/1996
M-32-08	COMPLETE GROUT INTERIM STATUS TANK ACTIONS.	TBD
M-32-08-T01	COMPLETE AND SUBMIT INTEGRITY ASSESSMENT REPORT FOR GROUT INTERIM STATUS TANK SYSTEM. COMPLETE ACTIVITIES REQUIRED TO CORRECT ANY DEFICIENCIES DESCRIBED IN THE REPORT RELATED TO TANK SYSTEM COMPLIANCE.	TBD
M-34-00 LEAD AGENCY: ECOLOGY	COMPLETE ACTIONS SPECIFIED BY AGREED INTERIM MILESTONES RELATED TO REMEDIATION OF THE K-EAST BASINS.	TBD
M-34-00-T02	INITIATE K-EAST BASIN FUEL ENCAPSULATION.	TBD
M-34-00-T06	INITIATE K-EAST BASIN SLUDGE ENCAPSULATION.	11/30/1996
M-34-00-T07	COMPLETE ENCAPSULATION OF THE FUEL AND SLUDGE WITHIN K-EAST BASIN.	12/31/1998
M-34-00-T08	REMOVE ALL FUEL AND SLUDGE FROM BOTH K-EAST AND K-WEST BASINS IN AN ENCAPSULATED FORM.	12/31/2002
M-34-01	CONTAMINATED K-EAST BASIN WATER WILL BE REMOVED, REPLACED, OR TREATED. THE TIMING OF THIS ACTION MUST BE COORDINATED WITH ENCAPSULATION AND THE CLEANING OF THE RESIDUAL CONTAMINATION IN THE BASIN AND (AS NOTED BELOW) THE ALTERNATIVE SELECTION IS DEPENDANT ON THE FEASIBILITY OF MOVING ENCAPSULATED K-EAST BASIN FUEL AND SLUDGE TO THE K-WEST BASIN. THE CONTAMINATED WATER WILL BE DISPOSITIONED IN ACCORDANCE WITH REASONABLE AVAILABLE HANFORD SITE TREATMENT AND/OR DISPOSAL PROCESSES AND METHODS, AVAILABLE AT THE TIME OF THIS ACTION. UNLESS A BETTER OPTION BECOMES AVAILABLE, THE WATER WILL BE TRUCKED TO C-018 FOR DISPOSAL. IF THE K-EAST FUEL AND SLUDGE, ONCE ENCAPSULATED, CAN BE MOVED TO THE K-WEST BASIN (DETERMINED THROUGH A SEPTEMBER 1994 ENGINEERING STUDY TARGET DATE) THE	TBD

DRAFT

Change Number	Federal Facility Agreement and Consent Order Change Control Form	Date
M-32-96-03	Do not use blue ink. Type or print using black ink.	Nov. 1, 1996

Originator: D. E. Jackson

Phone: (509) 376-4851

Class of Change

[ ] I - Signatories [X] II - Executive Manager [ ] III - Project Manager

Change Title

Delete TPA interim milestone M-32-06.

Description/Justification of Change

The 244-AR Vault consists of a two-level, multi-cell, reinforced concrete structure that houses two 43,000 gallon tanks (TK-001 and TK-002) and two 4785 gallon tanks (TK-003 and TK-004). The four tanks operate under interim status and are presently addressed under the dangerous waste Double-Shell Tank Part A Permit, Form 3. No waste transfers to the 244-AR Vault have been made since 1978 (estimated). Current status is to continue monitoring the existing waste levels in the tanks and sumps, remove sump liquids as soon as operationally feasible, and begin deactivation planning. As there are no future missions planned for this vault, efforts are underway to transfer the 244-AR Vault to the dangerous waste Single-Shell Tank (SST) Part A Permit, Form 3.

(continued on the following page)

Impact of Change

This change will align the 244-AR Vault with its correct TPA milestone. Closure of the 244-AR Vault can then be achieved without requiring upgrades on a unit that has no future use.

Affected Documents

Hanford Federal Facility Agreement and Consent Order Action Plan, Appendix D, Table D.

Approvals

DOE	Date	___ Approved	___ Disapproved
EPA	Date	___ Approved	___ Disapproved
Ecology	Date	___ Approved	___ Disapproved

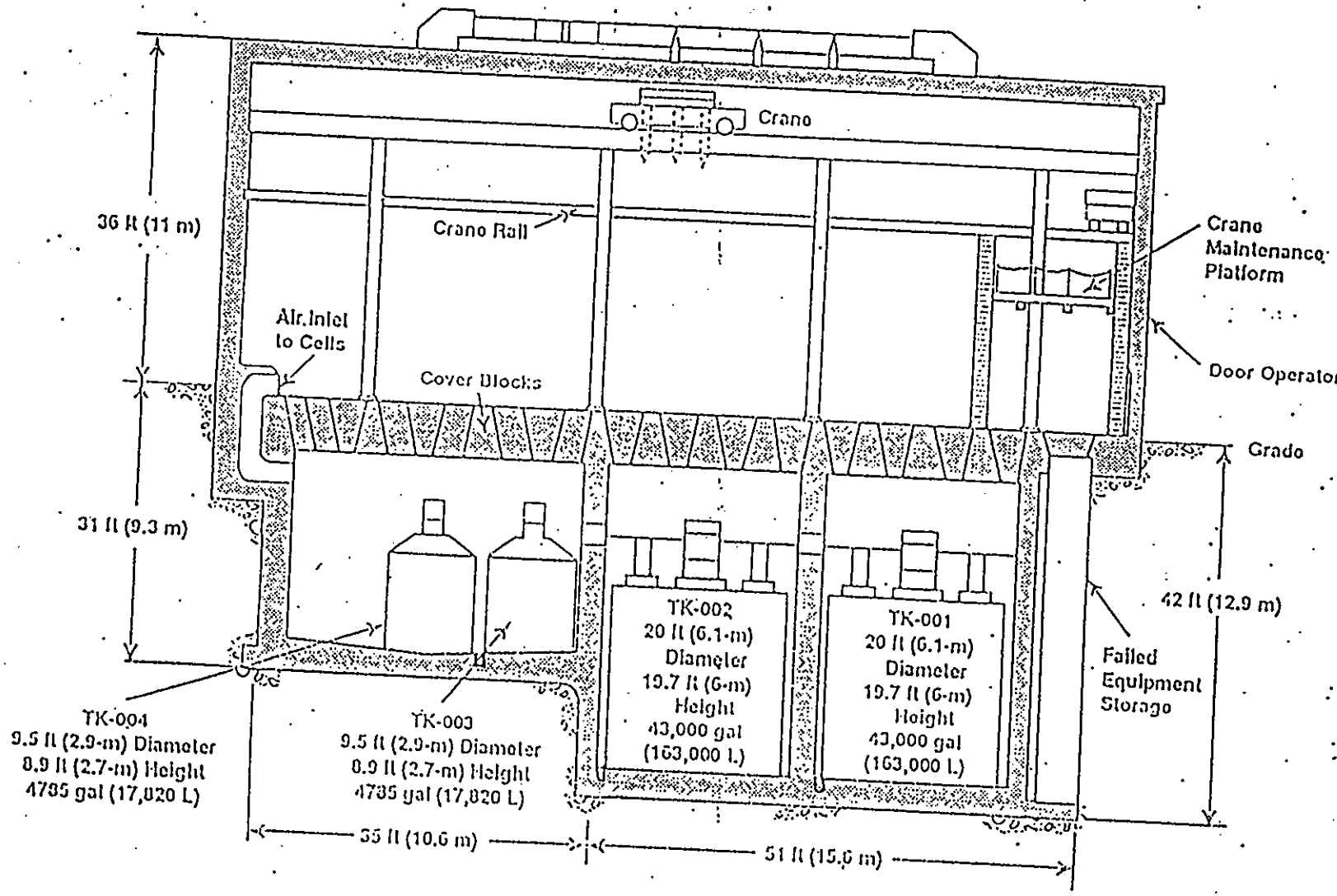
(Description/Justification of Change continued)

During initial negotiations on TPA Milestone M-32-00, it was determined that SST units would require separate negotiations/milestones. Therefore, the scope of TPA Milestone M-32-00 excluded SST units. Once under the SST Part A Permit, the 244-AR Vault will be addressed by TPA Milestone M-45-00. TPA Milestone M-45-00 addresses complete closure of all SST farms without mandating upgrades to achieve compliance with RCRA interim status tank system requirements. No wording changes, due to this transfer, need be made to Milestone M-45-00.

Modify TPA interim milestone M-32-06 as follows:

M-32-06 Delete.

244-AR Vault


Crane
36 ft (11 m)
Crane Rail
Crane Maintenance Platform
Air Inlet to Cells
Cover Blocks
Door Operator
Grade
31 ft (9.3 m)
42 ft (12.9 m)
TK-002
20 ft (6.1-m) Diameter
19.7 ft (6-m) Height
43,000 gal (163,000 L)
TK-001
20 ft (6.1-m) Diameter
19.7 ft (6-m) Height
43,000 gal (163,000 L)
Failed Equipment Storage
TK-004
9.5 ft (2.9-m) Diameter
8.9 ft (2.7-m) Height
4785 gal (17,820 L)
TK-003
9.5 ft (2.9-m) Diameter
8.9 ft (2.7-m) Height
4785 gal (17,820 L)
35 ft (10.6 m)
51 ft (15.6 m)
39200044.23

32970

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

November 16, 1993

Mr. James D. Bauer
U.S. Department of Energy
P.O. Box 550
Richland, WA 99352-0550

Dear Mr. Bauer:

Re: 242-A Evaporator Restart

This letter is in response to five issues raised at the presentation made on October 28, 1993. Your staff requested that we concur on these issues so that the evaporator restart could begin on schedule. Our response is as follows:

If the tank farm interim status training plan is submitted by December 31, 1993, no objection will be made to the restart. Preparation of these plans should be closely coordinated with Ecology to ensure that no unexpected problems arise upon submission. The contents of this submission are being added to the conditions in the Notice of Deficiency list in the Part B Permit Application.

If the 242-A and LERF Resource Conservation and Recovery Act Inspection schedules are submitted by December 1, 1993, no objection will be made to the restart of the Evaporator.

The close coordination of the writing of these schedules and the forms required should continue. The contents of this submission are being added to the conditions in the Notice of Deficiency list for the Part B Permit Application.

If the comprehensive revision of the 242-A Evaporator sampling and analysis plan in order to meet the data quality objective program and the ALARA revisions to the EPA SW-846 procedures continues in good faith, no objection will be raised to the scheduled restart. The contents of this submission are being added to the conditions in the Notice of Deficiency list in the Part B Permit Review. This condition will be made a part of the Notice of Deficiency list for the 242-A Evaporator.

If the revision of the storage code in the Part A Application, coupled with the same revision for the applicable sections in the Part B Application, no objection will be raised to the restart of the 242-A Evaporator.

No physical revision of the pipe wall penetrations or the floor drains in the evaporator pump room will be required prior to the evaporator restart. If at any time leakage is seen or detected from either of these installations, or if for any reason these installations are repaired or rebuilt, they will be rebuilt or repaired in accordance with regulations. Should a spill occur in the evaporator pump room, the sump and the piping shall be rinsed three times as required in WAC 173-303-160 as appropriate. "Appropriate" in this case means that the original regulation was written for a free container, not a sump, so that judgement will have to be used in the application of the regulation. The rinsate shall be transferred to the double shell tanks.

If you have any questions about this letter, please call me at (206) 407-7139.

Sincerely,

Gary Anderson, P.E.
Nuclear and Mixed Waste Management Program

GA:jr

cc: Paul Carter, DOE
Dan Duncan, EPA
Ronald Gerton, DOE
Sue Price, WHC
Gene Senat, DOE
Doug Sherwood, EPA

DRAFT

Change Number	Federal Facility Agreement and Consent Order Change Control Form	Date
M-32-96-02	Do not use blue ink. Type or print using black ink.	10-17-96

Originator: M. Ramsay / D. Jackson

Phone: (509) 376-7924 / 376-4851

Class of Change

[ ] I - Signatories [X] II - Executive Manager [ ] III - Project Manager

Change Title

Addition of M-32 Milestones for the Double-Shell Tank System.

Description/Justification of Change

Major Milestone M-32-00 states that "completion of interim milestone tasks may identify the need for additional actions or interim milestones in the future." The Tank Waste Remediation Systems Transfer Facility Compliance Plan (WHC-SD-WM-EV-094, Rev. 0) submitted in fulfillment of M-32-04-T04 identified portions of the Double-Shell Tank (DST) Transfer System that are not in full compliance with interim status dangerous waste management regulations, and require corrective actions and/or compliance strategies. This report is to be updated in December 1996 (Rev. 1). The Tank Waste Remediation System Tank System Integrity Assessments Program Plan (WHC-SD-WM-AP-017, Rev. 1) submitted in fulfillment of M-32-04-T05 identified a path forward to complete integrity assessments of the DST system including double-contained receiver tanks (DCRTs), the 241-A-350 Drainage Lift Station, the 204-AR Waste Unloading Facility, and various transfer lines, diversion boxes, valve pits, pump pits, seal pots, and cleanout boxes.

(Continued on the following page)

Impact of Change

Affected Documents

Hanford Federal Facility Agreement and Consent Order Action Plan, Appendix D, Table D.

Approvals

DOE	Date	___ Approved	___ Disapproved
EPA	Date	___ Approved	___ Disapproved
Ecology	Date	___ Approved	___ Disapproved

Description/Justification of Change (cont'd)

The DST System Part B Permit is scheduled for issuance in September 1999 by modification of the Hanford Facility RCRA Permit, Dangerous Waste Portion. The interim milestones of this change package support the issuance of that Part B Permit by providing a compliance strategy for the completion of the DST system integrity assessments.

Once complete, the integrity assessment reports will include a schedule for addressing deficiencies found during the assessments. The transfer facility compliance plan will address other deficiencies that are not related to structural integrity, such as leak detection. Based on the nature of the deficiency, addressing that deficiency could include a corrective action, compliance strategy, or future negotiations. Minor deficiencies will have identified resolution (corrective action or compliance strategy) completion dates in the report's deficiency schedule. In the event that a deficiency requires major efforts to remedy the situation, the U.S. Department of Energy, Richland Operations Office and the Washington State Department of Ecology will enter into negotiations on methods to address the issue. In such cases, the report's schedule will propose an initial negotiation meeting date.

This change package adds two new interim milestones, M-32-09 and M-32-10. Interim milestone M-32-09 addresses the DST integrity assessments, while M-32-10 addresses transfer lines (includes diversion boxes, valve pits, pump pits and cleanout boxes), catch tanks, DCRTs, and ancillary equipment (i.e., 241-A-350 Drainage Lift Station, 204-AR Waste Unloading Facility, and seal pots).

As part of the DST ultrasonic testing, results will be evaluated by a technical panel of experts (i.e., select members from the Tank Structural Integrity Panel). This panel's evaluation will be considered, along with other information, in determining the need for future ultrasonic testing beyond six DSTs.

Other DST dangerous waste tank system compliance issues, such as leak detection, may require the addition of a future interim milestone.

Add the following interim milestones:

M-32-09	**Complete integrity assessments for Double-Shell Tanks (DSTs).** These integrity assessments will consist of a combination of visual inspections and design reviews on all 28 DSTs, and ultrasonic testing on six DSTs (including their secondary containment). This milestone reflects an agreement between the Washington State Department of Ecology and the U.S. Department of Energy, Richland Operations Office that six DSTs will undergo ultrasonic testing for the integrity assessment of the 28 DSTs. The results of these tests will be evaluated to determine the need, if any, for future ultrasonic testing of part or all remaining DSTs. Tank wall ultrasonic testing: The extent of the examination shall be a 20 inch wide by 35 foot long vertical strip of the primary and secondary tanks to detect wall thinning and pits. Crack detection in the primary tank shall include the area adjacent to horizontal welds and will detect longitudinal cracks. Tank bottom ultrasonic testing: The extent of the examination shall be the area accessible in 8 air slots under the primary tanks at the high stress area between the knuckle and tank bottom. Cracks oriented perpendicular to the air slot, acted on by the highest tank stresses will be detected. Also, wall thinning and pits will be detected.	**September 1998**
M-32-09-T01	Perform ultrasonic testing of two tank walls and one tank bottom.	September 1997
M-32-09-T02	Perform ultrasonic testing of four tank walls and five tank bottoms.	September 1998
M-32-09-T03	Complete and submit integrity assessments reports for six DSTs. Provide a schedule to address any deficiencies described in the report related to tank compliance.	

M-32-10	**Complete integrity assessments for specified Double-Shell Tank (DST) system.**	**September 1999**
M-32-10-T01	Complete and submit integrity assessment reports for DST transfer lines (includes diversion boxes, valve pits, pump pits and cleanout boxes). This assessment will be based on a representative evaluation. Provide a schedule to address any deficiencies described in the report related to tank transfer line compliance.	December 1996
M-32-10-T02	Complete and submit integrity assessment reports for nine catch tanks. These catch tanks are 241-A-302A, 241-ER-311, 241-EW-151, 241-TX-302C, 241-U-301B, 241-UX-302A, 241-AZ-151, 241-AX-152, and S304. Provide a schedule to address any deficiencies described in the report related to catch tank compliance.	September 1999
M-32-10-T03	Complete and submit integrity assessment reports for five double-contained receiver tanks (DCRTs). These DCRTs are 244-TX, 244-BX, 244-U, 244-S, and 244-A. Provide a schedule to address any deficiencies described in the report related to DCRT compliance.	September 1999
M-32-10-T04	Complete and submit integrity assessment reports for DST ancillary equipment. This ancillary equipment is comprised of the 241-A-350 Drainage Lift Station, the 204-AR Waste Unloading Facility, and 16 seal pots (for which a representative evaluation will be performed). Provide a schedule to address any deficiencies described in the report related to tank ancillary equipment compliance.	September 1999

Double-Shell Tank System Integrity Assessment Status

November 1, 1996

Events from May Through Present

- May - WHC Decision Board revises the tank inspection strategy
- June 25 - Meeting with Tank Structural Integrity Panel
  - It is important to know the condition of the tanks
  - First, collect ultrasonic data on a tank
- August - RL directed WHC to execute the inspection strategy
- September 27 - Contract awarded to SAIC to perform ultrasonic examination of the tank wall

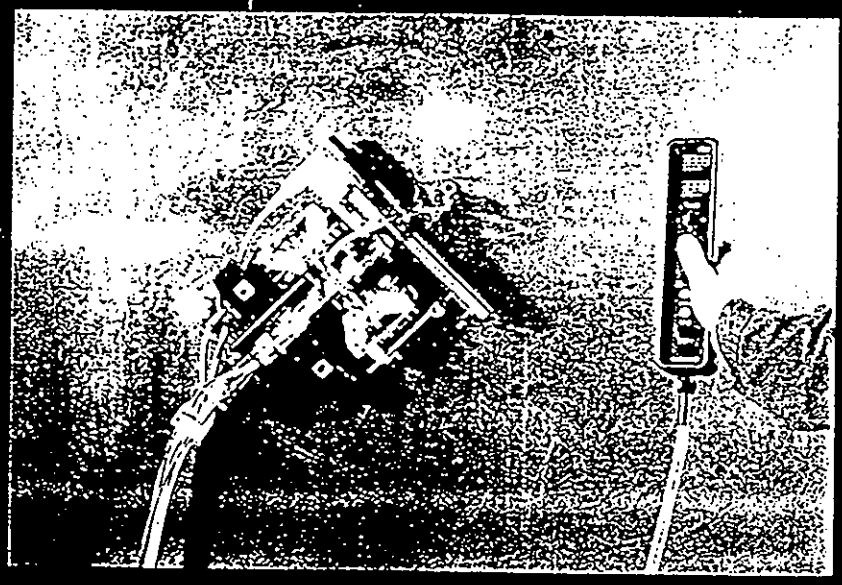
Near Term Actions (approximate dates)

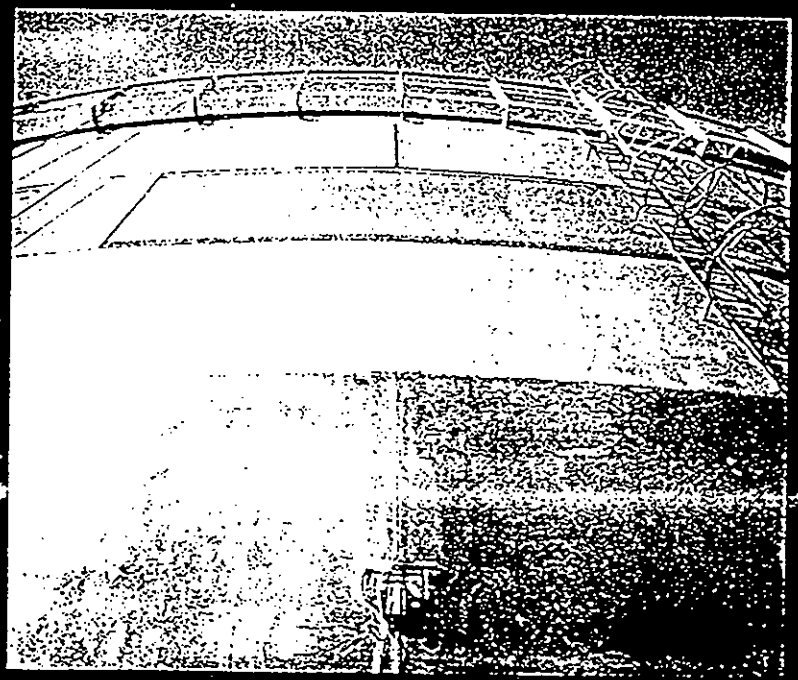
- Week of November 11 - Performance test in tank mockup
- Week of November 18 - Tank AW103 trial examination (conditional on acceptable performance test)
- Week of November 25 - Tank AW103 wall examination (conditional on acceptable trial examination)

AWS-5

Automatic
Weld
Scanner

Remote-Controlled Magnetic Wheel Ultrasonic Scanner





FORCE INSTITUTES

96100409-1DF

Statement of Dispute
Regarding Change Control Form M-32-99-02

ATTACHMENT 4

March 1998 Briefing to Ecology (relevant pages)

LOCKHEED MARTIN

244-CR AND 244-AR

COMPLIANCE STATUS

UPDATE

March 12, 1998

Phil Miller

LOCKHEED MARTIN

244-AR

- **PRE-COMPLIANCE ACTIVITY FACILITY CONDITIONS:**
  - Inactive
  - Ventilation Systems (Control Building, Canyon, Vessel Vent) in State of Dis-Repair and Cannot be Operated
  - Support Systems (Steam, Sanitary Water, Raw Water) Isolated and Capped
  - Due to Ventilation and Support System Condition, It is Not Possible to Jet the Sumps to their Respective Tanks Using Historic Methods
  - Rainwater/Snowmelt Intrusion Problem Exists; Intrusion Paths Unknown

LOCKHEED MARTIN

244-AR

- PRE-COMPLIANCE ACTIVITY FACILITY CONDITIONS (CONTINUED):
  - Tank and Sump Levels are Unknown

Tank	Sump
#1 - 1,300 Gallons	#1 - 800 Gallons
#2 - 12,250 Gallons	#2 - 30 Gallons
#3 - 2,000 Gallons	#3 - 2,650 Gallons
#4 - 250 Gallons	

- COMPLIANCE ISSUE:
  - The 244-AR Facility is Not Compliant with WAC 173-303-640 as Liquid is Not Being Removed from Secondary Containment Within the Required Time Frame.

244-AR LOCKHEED MARTIN

♦ COMPLIANCE PROJECT STATUS:

- Air Jet Assembly Designed and Constructed
- Notice of Construction Approved
- Portable Exhauster Installed, Tested, and Has Been Operated
- One Unsuccessful Attempt Made to Air Jet Sump #3;
  Jetting Assembly Requires Modification

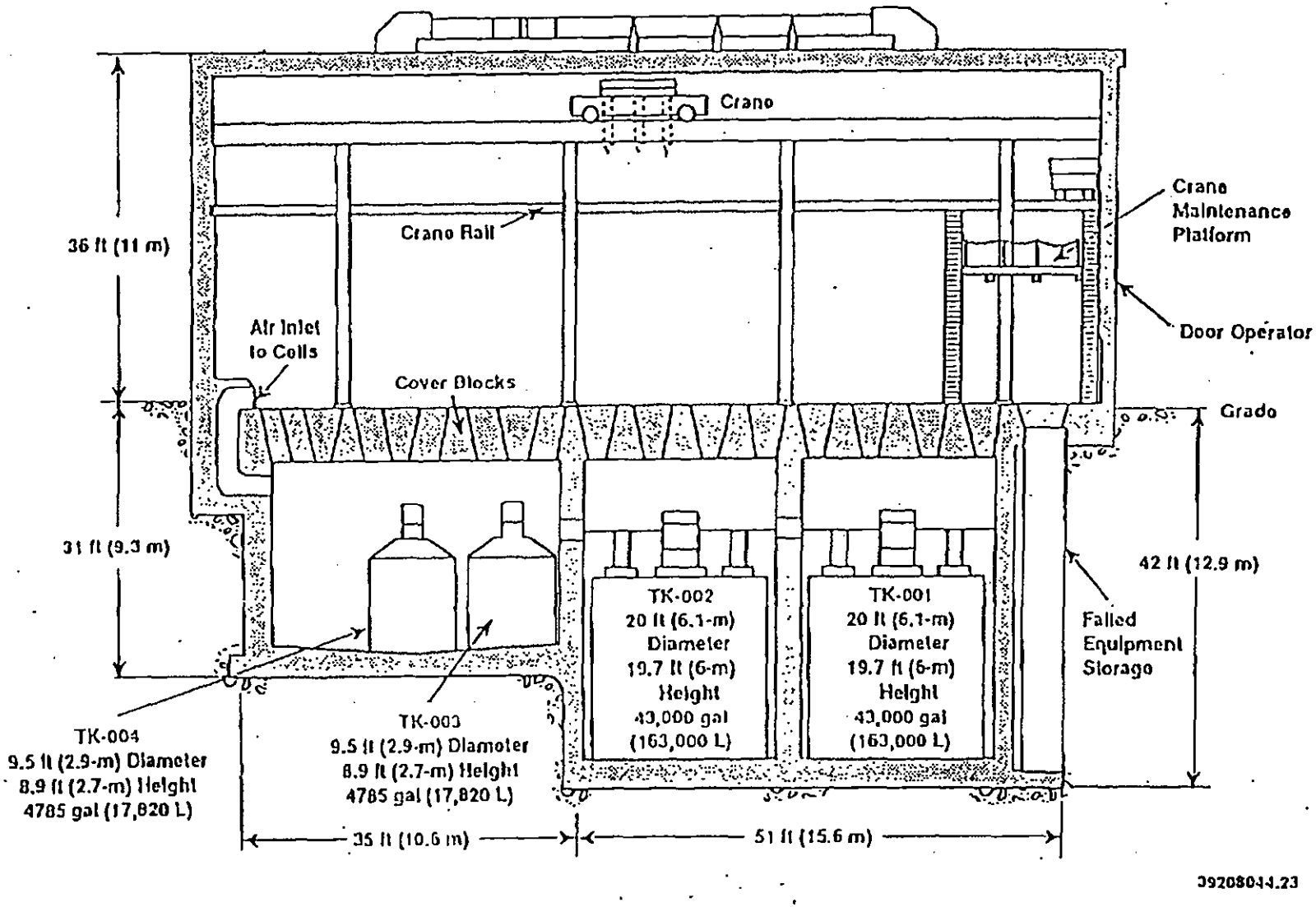
♦ CURRENT COMPLIANCE STATUS:

- Facility Remains Out of Compliance With WAC 173-303-640 Due to Liquid in Secondary Containment
- Compliance Activity Budget "ZEROED" for FY 1998 & FY 1999

♦ OPERATIONAL CONCERNS:

- Sump #1 - Level Has Decreased 560 Gallons to 240 Gallons.
  Reason Unknown
- Sump #2 - Level Has Decreased 30 Gallons to 0 Gallons.
  Reason Unknown
- Sump #3 - Level Has Increased 424 Gallons to 3074 Gallons
  Intrusion Suspected

244-AR Vault


Crane
Crane Rail
Crane Maintenance Platform
Door Operator
Air Inlet to Cells
Cover Blocks
Grade
36 ft (11 m)
31 ft (9.3 m)
42 ft (12.9 m)
TK-004
9.5 ft (2.9-m) Diameter
8.9 ft (2.7-m) Height
4785 gal (17,820 L)
TK-003
9.5 ft (2.9-m) Diameter
8.9 ft (2.7-m) Height
4785 gal (17,820 L)
TK-002
20 ft (6.1-m) Diameter
19.7 ft (6-m) Height
43,000 gal (163,000 L)
TK-001
20 ft (6.1-m) Diameter
19.7 ft (6-m) Height
43,000 gal (163,000 L)
Failed Equipment Storage
35 ft (10.6 m)
51 ft (15.6 m)
39208044.23

Statement of Dispute
Regarding Change Control Form M-32-99-02

ATTACHMENT 5

RL letter from G. Sanders to M. Wilson, Ecology, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Change Control Form M-32-99-02 Addressing Interim Milestone M-32-06 and Target Date M-32-06-T01," 99-EAP-300, dated June 21, 1999.

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

JUN 21 1999

99-EAP-300

Mr. Mike Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504

Dear Mr. Wilson:

HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) CHANGE CONTROL FORM M-32-99-02 ADDRESSING INTERIM MILESTONE M-32-06 AND TARGET DATE M-32-06-T01

Enclosed for your approval is a signed Tri-Party Agreement Change Control Form M-32-99-02, which deletes Interim Milestone M-32-06 and Target Date M-32-06-T01 from the M-32 Milestone series. Currently, the interim milestone and target date state:

M-32-06	244-AR Vault Interim Status Tank Actions.	TBD
M-32-06-T01	Complete and submit integrity assessment report and identified upgrades for 244-AR Vault interim status tank system (except that DST transfer lines that penetrate the 244-AR Vault will continue to be used.) Provide a schedule to address any deficiencies described in the report related to tank system compliance.	TBD

The TBD completion date reflects the decision to perform the identified actions upon restart of the 244-AR Vault operations. As there are no future missions planned for this vault, the interim milestone and target date become obsolete. The 244-AR Vault has been moved under the Single-Shell Tank Part A Permit and will be addressed by Milestone M-45-00. These milestones are no longer appropriate for Milestone M-32-00 and should be removed from the M-32 Milestone series.

JUN 21 1999

If you have any questions on the enclosed Change Control Form, please call me at (509) 376-6888.

Sincerely,

George H. Sanders, Administrator
Hanford Tri-Party Agreement

EAP:HMR
Enclosure

cc w/encl:
J. R. Wilkinson, CTUIR
L. J. Cusack, Ecology
S. E. Dahl, Ecology
A. Valero, Ecology
D. R. Sherwood, EPA
J.S. Hertzel, FDH
A.M. Umek, FDH
L.E. Borneman, FDH
M. Reeves, HAB
B. G. Erlandson, LMHC
D. Powaukee, NPT
M. L. Blazek, OOE
A. R. Sherwood, WMH
R. Jim, YIN

Change Number	Federal Facility Agreement and Consent Order Change Control Form	Date
M-32-99-02	Do not use blue ink. Type or print using black ink.	April 21, 1999

Originator — G. H. Sanders

Phone — (509) 376-6888

Class of Change

[ ] I – Signatories [X] II – Executive Manager [ ] III - Project Manager

Change Title

Delete Hanford Federal Facility Compliance Agreement and Consent Order (TPA) interim milestone M-32-06 and target date M-32-06-T01.

Description/Justification of Change

The 244-AR Vault consists of a two-level, multi-cell, reinforced concrete structure that houses two 43,000-gallon tanks (TK-001 and TK-002) and two 4785-gallon tanks (TK-003 and TK-004). No waste transfers to the 244-AR Vault have been made since 1978 (estimated). Current status is to continue monitoring the existing waste levels in the tanks and sumps, remove sump liquids as soon as operationally feasible, and begin deactivation planning. As there are no future missions planned for this vault, the 244-AR Vault and associated tanks have been transferred to the dangerous waste Single-Shell Tank (SST) Part A Permit, Form 3.

During initial negotiations on TPA Milestone M-32-00, it was determined that Single Shell Tank (SST) units would require separate negotiations/milestones. Therefore, the scope of TPA Milestone M-32-00 excluded SST units. Now under the SST Part A Permit; the 244-AR Vault will be addressed by TPA Milestone M-45-00. TPA Milestone M-45-00 addresses complete closure of all SST farms without mandating upgrades to achieve compliance with RCRA interim status tank system requirements. No wording changes, due to this transfer, need be made to Milestone M-45-00.

(continued on page 2)

Impact of Change

This change will align the 244-AR Vault with its correct TPA M-45-00 milestones for Complete Closure of all Single Shell Tank Farms. This change will also require modification of Hanford Federal Facility Agreement and Consent Order Action Plan, Appendix B, in order to move 244-AR from the DST Treatment, Storage, and Disposal Unit to the appropriate SST Operable Unit.

Affected Documents

Hanford Federal Facility Agreement and Consent Order Action Plan, Appendix D, as amended and Appendix B, as amended.

Approvals

[signature] for R.T. French — DOE	6-21-99 — Date	X Approved	___ Disapproved
______ — EPA	______ — Date	___ Approved	___ Disapproved
______ — Ecology	______ — Date	___ Approved	___ Disapproved

escription/Justification of Change (cont'd)

odify TPA interim milestone M-32-06 and target date M-32-06-T01 as follows:

-32-06	Complete 244-AR Vault Interim Status Tank Actions.	Delete
-32-06-T01	Complete and submit integrity assessment report and identified upgrades for 244-AR Vault interim status tank system (except that DST transfer lines that penetrate the 244-AR Vault will continue to be used). Provide a schedule to address any deficiencies described in the report related to tank system compliance.	Delete

ATTACHMENT 6

RL letter from G. Sanders to M. Wilson, Ecology, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Change Control Form M-32-99-02 Addressing Interim Milestone M-32-06 and Target Date M-32-06-T01, Initiation of Dispute Resolution," 99-EAP-398, dated July 12, 1999.

51936

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

99-EAP-398

JUL 12 1999

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504

Dear Mr. Wilson:

HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT), CHANGE CONTROL FORM M-32-99-02 ADDRESSING INTERIM MILESTONE MILESTONE M-32-06 AND TARGET DATE M-32-06-T01, INITIATION OF DISPUTE RESOLUTION

On June 21, 1999, the U.S. Department of Energy, Richland Operations Office (RL) provided the State of Washington Department of Ecology (Ecology) with a change control form, for Interim Milestone M-32-06 and Target Date M-32-06-T01, requesting deletion of the "244-AR Vault Interim Status Tank Actions" from the M-32-00 series. The fourteen-day period has expired without a formal response from Ecology which constitutes disapproval of the request per the requirements of Agreement Action Plan Section 12.3.3.

As a result of Ecology's disapproval of the M-32-99-02 change control form, RL hereby gives notice of its election to initiate dispute resolution as set forth in Tri-Party Agreement Article VIII.

RL looks forward to working collaboratively and amicably with Ecology to resolve your concerns regarding the request to delete the 244-AR Vault Interim Status Tank Action commitments from the M-32-00 series. If you have questions, please contact me on (509) 376-6888.

Sincerely,

George H. Sanders, Administrator
Hanford Tri-Party Agreement

EAP:HMR

cc: J. R. Wilkinson, CTUIR
L. J. Cusack, Ecology
S. E. Dahl, Ecology
R. F. Stanley, Ecology
R. V. Heggen, Ecology
A. Valero, Ecology
D. R. Sherwood, EPA
L. E. Borneman, FDH
S. B. Cherry, FDH
J. S. Hertzel, FDH
K. J. Kjarmo, FDH
T. B. Veneziano, FDH
M. Reeves, HAB
B. G. Erlandson, LMHC
P. Sobotta, NPT
M. L. Blazek, OOE
R. Jim, YIN
A. R. Sherwood, WMH
Administrative Record, H6-06